UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,627	09/29/2003	Prajakta S. Joshi	350078.409	4709

60172   7590   08/03/2009
SCHWABE, WILLIAMSON & WYATT, P.C.
1420 FIFTH, SUITE 3010
SEATTLE, WA 98101

EXAMINER
VO, TED T

ART UNIT	PAPER NUMBER
2191	

MAIL DATE	DELIVERY MODE
08/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2009*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *34-38,43-46,51-55 and 60-74* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *34-38,43-46,51-55 and 60-74* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *4/23/09*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the amendment filed on 04/23/2009.

Claims 1-33, 39-42, 47-50, 56-59 are canceled.

Claims 63-74 are new.

Claims 34-38, 43-46, 51-55, 60-74 are pending in the application.

Claimed Objections

2.   Claim 34 is object to. The claim is incomplete.

Response to Arguments

3.   This is in response to the arguments in Remarks, filed on 04/23/09.

In response to the section II in the remarks, Applicants state they submitted an affidavit

submitted, on 10/07/2008 under 37 CFR 1.132 in order to traverse the rejection set forth in the

office actions.

It should be noted that the traversal using 37 CFR 1.132 is to rebut a rejection under 35

USC 102(**a**) type (emphasis added); i.e. an affidavit under 37 CFR 1.132 shows that the

inventorship of the application is correct in that the reference discloses subject matter derived

from the applicant rather than invented by the author, patentee, or applicant of the published

application notwithstanding the authorship of the article or the inventorship of the patent or

published application.

The White paper is the statutory bar reference under 35 USC 102(b). The reference of

AlteonWebSystems (hereinafter: Alteon), "Enhancing Web User Experience with Global Server

Load Balancing" in view of the reference of Cisco Document (hereinafter: Cisco), "Configuring

the CSS Domain Name Service", both appear not being derived from the inventorship of the

application.

In response to the section III in the remarks:

It should be noted that Claims 34-38, 60, 43-46, 61, 51-55, 62 remains the same as in the

previous filing, The claims, particularly, claim 34, 43, 51, 63, 63, 71, are too broad that read on

the basic concept and the discussions in the references. The arguments are not persuasive.

Examiner contends that the cited portions disclose such generic limitations.

Regarding newly added claims, particularly independent claims 63, 67, 71,

Depict claim 71: (New) A network device, comprising:

a switch configurable with a private virtual IP address, the switch being adapted

to identify a public virtual IP address that is mapped to the private virtual IP address configured

at the switch, and the switch being adapted to communicate the identified public virtual IP

address to a load balancing controller.

Any skill in the art will find that the claims read on the GSLB Operation on the Figure

One of Alteon or in combined with the Authoritative DNS Figure 7-1 of Cisco. The affidavit

clearly admits the claims read on the White Pater.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 34-38, 43-46, 51-55, 60-74 are rejected under 35 U.S.C. 102(b) as being

anticipated by White Paper from Foundry Networks, "Server Load Balancing in Today's Web-

enabled Enterprises" (Hereinafter: White Paper), 4-2002.

<u>As per Claim 34</u>: White paper discloses,

A method of providing load balancing <u>usable with</u> a load balance switch and a plurality of site

switches that <u>are</u> each <u>adapted to</u> couple at least one host server to a network, the method

comprising:

obtaining at one of said site switches mapping information that provides a translation between

a private virtual IP address, configured at said site switch and associated with said at least one

host server corresponding to said site switch, and a public virtual IP address; (See p. 6, the

Figure – a Site such as the box 4 in the figure, having a Controller GSLB switch that configures

to associate with at least one host server: HongKong)***; and***

providing, by said site switch, said public virtual IP address to at least one load balancing

controller (See p. 6: Controller GSLB's response with the information of HongKong web host

for load balancing. The update information is performed in the Controller that carriers the public

VIP address and returns the address to the local DNS of a client in San Francisco. It has the

ability to provide network update (See p. 2).

As per Claim 35: White paper discloses, *The method of claim 34 wherein said providing, by*

said site switch, said public virtual IP address to said at least one load

balancing controller includes providing by said site switch said public virtual IP address to a

load balancing controller located at said load balance switch (Refer to the operation of the

Controller GSLB Switch, and look up process 4, in p. 6).

As per Claim 36: White paper discloses, *The method of claim 35 wherein said providing, by*

said site switch, said public virtual IP address to said at least one load balancing controller

further includes providing by said site switch said public virtual IP address to a load balancing

controller located at said site switch, to enable said site switch to balance traffic among plural

ones of said at least one host server corresponding to said site switch and associated with said

private virtual IP address (Refer to the operation of the Controller GSLB Switch, and look up

processes 4, for search the best IP address, in p. 6).

As per Claim 37: White paper discloses, *The method of claim 34 wherein public virtual IP*

addresses received by said load balancing controller as part of reply to a query for network

address and that do not have indication in an address record as being associated with

corresponding said site switches, are treated as real IP addresses by said load balancing

controller and are excluded from having applied thereto any metric of a load balancing

algorithm that is usable with virtual IP addresses. See the operation in the Figure in Figure 6,

and look up process. Particularly, in the paragraph in p. 5, "SLB Technique", discussing about

allowing the client to access as a real server for subsequent requests.

As per Claim 38: White paper discloses, *The method of claim 34 wherein said public virtual IP*

address provided to said at least one load balancing controller enables said load balancing

controller to apply at least one metric of a load balancing algorithm to said public virtual IP

address, said at least one metric including an active bindings metric that prefers a virtual IP

address, configured at respective said site switches, having a maximum number of active ones

of said host servers bound to said preferred virtual IP address, rather than preferring another

virtual IP address having a number of bound active ones of said host servers that is less than

said maximum number (Refer to the functionality of GSLB Metrics™, as seen in the discussion

in p. 9, particularly in High Availability and Maximum Scalability).

As per Claim 60: The White paper discloses, *The method of claim 34 wherein said obtaining at*

said site switch said mapping information includes obtaining at said site switch said mapping

information from a mapping device that includes a network address translation device or a

firewall device

(See p. 10, "Firewall Load balancing". It should be note that firewall is no longer new in the

art).

As per Claims 43-46, 61: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 51-55, 62: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 63-66: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 67-70: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 71-74: See the rationale addressed in the rejection of Claim 34-38, 60.

Claim Rejections – 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

7.   Claims 34-38, 43-46, 51-55, 60-74 are rejected under 35 U.S.C. 103(a) as being

unpatentable over AlteonWebSystems (hereinafter: Alteon), "Enhancing Web User Experience

with Global Server Load Balancing" in view of Cisco Document (hereinafter: Cisco),

"Configuring the CSS Domain Name Service".

As per Claim 34: Alteon discloses,

A method of providing load balancing using a load balance usable with a load balance switch

(Authorized Web Switch) ***and a plurality of site switches*** (See Figure One, a web switch at

every DNS) *that **are** each **adapted to** couple at least one host server to a network, the method*

comprising:

obtaining at one of said site switches mapping information that provides a translation

between a private virtual IP address, configured at said site switch and associated with said at

least one host server corresponding to said site switch, and a public virtual IP address;

(See p. 1 and p. 2, Section GSLB overview explains a client, such as the client shown in

FIGURE ONE, looks up at a local DNS server (1) asking for a website. The Local DNS, which

IP address is considered as local to the client, examines its cache for the website. If the

information is not available in the local server, it requests a web switch at an authorized DNS

(site A), where at the authorized DNS, the web switch performs a selection, for example, a site B

(i.e. translation between local DNS where the Client starts site B (public) in response to the

return from the query: configured at said site switch [The web switch at site A] and associated

with said at least one host server[site B] corresponding to said site switch), ***and***

providing, by said site switch, said public virtual IP address (i.e. the return of "3" with the

information of site B) ***to at least one load balancing controller***

[DSSP components is embedded in any DNS – See DSSP Updates within Web Switches at site

A, Site B, site C etc.]

(See p. 1 and p. 2: In the Figure one, at the web switch site A, it provides a return address of the

VIP address site B. See Figure one, and p.3, in associating with GSLB, DSSP components in

web switches provide periodic updates and trigger updates: This act addresses "*address record to*

indicate said public virtual IP address as being associated with said site switch".

The Alteon uses the terms "select" to provide web switch at an authorized DNS; does not the name private VIP and public VIP as for obtaining the selection.

Cisco shows an application peering protocol, which is in a similar network topology as of Alteon. It include NDS exchange policies, where each DNS has private VIP addresses and public VIP addresses (see p. 12), where private VIP address is considered as an address connected within a user to his server (See p. 12: user to server1/DNS1) and public VIP address is considered as the connection within DNS1 to other servers (see p.12-13), Alto Cisco shows the act that is configured to switch from a private VIP address for obtaining a public VIP is as "translation" (see p. 2: item 1, see p. 12, item 2, etc).

It would be obvious to ordinary in the art in combining the arts of Alteon (which is lacking using *public virtual IP* when selecting another site) with the teaching of Cisco in resolving domain names using public Internet-routable IP address (Virtual IP address) as a requirement by rules (See P. 12), the obviousness for combination is conforming to the network standard protocol in resolving Domain names.

As per Claim 35: Alteon and Cisco further disclose, ***The method of claim 34 wherein said providing, by said site switch, said public virtual IP address to said at least one load balancing controller includes providing by said site switch said public virtual IP address to a load balancing controller located at said load balance switch*** (See p. 2, the Figure one and its explanation, also should refer to the meaning of GSLB).

As per Claim 36: Alteon and Cisco further disclose, ***The method of claim 35 wherein said providing, by said site switch, said public virtual IP address to said at least one load balancing***

controller further includes providing by said site switch said public virtual IP address to a load

balancing controller located at said site switch, to enable said site switch to balance traffic

among plural ones of said at least one host server corresponding to said site switch and

associated with said private virtual IP address (See Figure one, and GSLB operation).

(Refer to the function of CGS; it provides the best IP addresses based on the info from the GSLB

Metrics™ (Also see DNS lookup Process), and causes to select a real server (balancing), as seen

in the Figure of p. 5).

As per Claim 37: Alteon and Cisco further disclose, *The method of claim 34 wherein public*

virtual IP addresses (e.g. site B) *received by said load balancing controller* (e.g. Web switch at

site A) *as part of reply to a query for network address* ("2" and "3") *and that do not have*

indication in an address record as being associated with corresponding said site switches, are

treated as real IP addresses by said load balancing controller and are excluded from having

applied thereto any metric of a load balancing algorithm that is usable with virtual IP

addresses (See p. 2, including three bullets, GLSB, develops a list or order list of sites, including

site health, and geographic location, and see all last three paragraphs).

As per Claim 38: Alteon and Cisco further disclose, *The method of claim 34 wherein said*

public virtual IP address provided to said at least one load balancing controller enables said

load balancing controller to apply at least one metric of a load balancing algorithm to said

public virtual IP address, (See GSLB operation in p. 2) *said at least one metric including an*

active bindings metric that prefers a virtual IP address (i.e. "web switch", that provides an

order list of sites that DNS uses when responding to the client requests), *configured at respective*

said site switches, having a maximum number of active ones of said host servers bound to said

preferred virtual IP address, rather than preferring another virtual IP address having a

number of bound active ones of said host servers that is less than said maximum number (See

text in p. 2, refer to "maximum connection thresholds").

As per Claim 60: Alteon and Cisco further disclose, White paper discloses, *The method of claim*

34 wherein said obtaining at said site switch said mapping information includes obtaining at

said site switch said mapping information from a mapping device that includes a network

address translation device or a firewall device (see p. 6, all four categories in Alteon

Websystems GSLB Advantages – it includes a firewall devices – It should be note that firewall

is no longer new in the art).

As per Claims 43-46, 61: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 51-55, 62: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 63-66: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 67-70: See the rationale addressed in the rejection of Claim 34-38, 60.

As per Claims 71-74: See the rationale addressed in the rejection of Claim 34-38, 60.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ted T. Vo whose telephone number is (571) 272-3706. The

examiner can normally be reached on 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wei Y. Zhen can be reached on (571) 272-3708.

The facsimile number for the organization where this application or proceeding is

assigned is the Central Facsimile number 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be

directed to the TC 2100 Group receptionist: 571-272-2100. Information regarding the status of

an application may be obtained from the Patent Application Information Retrieval (PAIR)

system. Status information for published applications may be obtained from either Private PAIR

or Public PAIR. Status information for unpublished applications is available through Private

PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

TTV
July 28, 2009

/Ted T. Vo/
Primary Examiner, Art Unit 2191